

## 2017 NAS User Survey Results

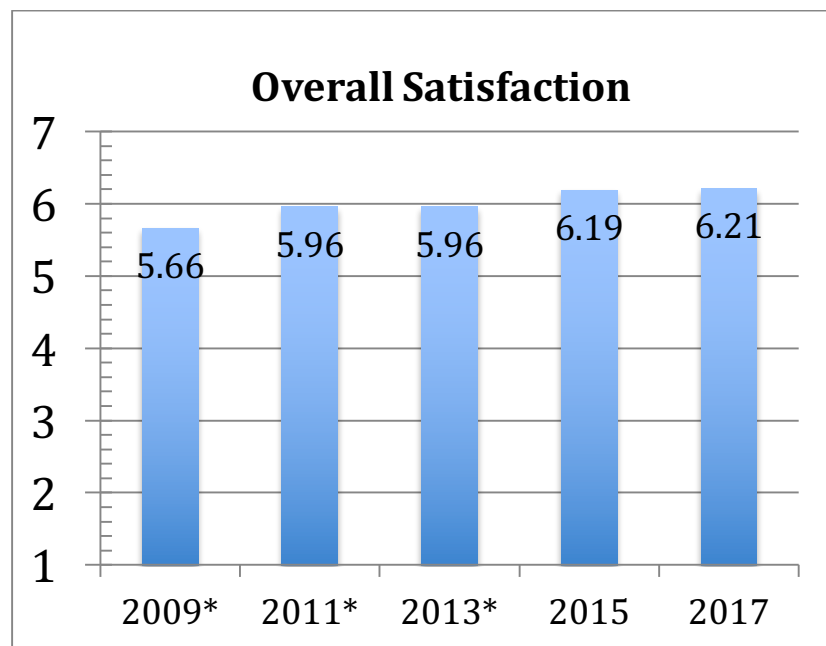
Between April 10<sup>th</sup> and May 5<sup>th</sup>, 346 NAS users, representing all NASA mission directorates (including supporting university and industry personnel), responded to the 2017 NAS User Survey. During the survey, the users assessed twelve HECC service areas where the NAS User Services team provides support. The goal was to evaluate and improve the services currently provided by NAS, as well as to identify ways we can better serve you in the future.

This report is intended as a high-level overview of the survey results and describes activities taken to improve performance in four key areas:

- Job turnaround time and computational resources
- Disk space and nobackup filesystems
- Training, knowledge base, and awareness of services offered
- Allocation and availability of resources

### Comparison with Previous User Surveys

The following chart shows overall satisfaction reported in the 2017 survey, compared with past surveys:



*The HECC survey measures user satisfaction in twelve HECC service areas. These quantitative results, as well as more detailed user feedback, help guide the HECC support team to focus on service quality improvements.*

\* Calibrated from 5-point scale

## Survey Highlights

After reviewing feedback from the User Survey, we have completed an analysis of the results. Highlights include:

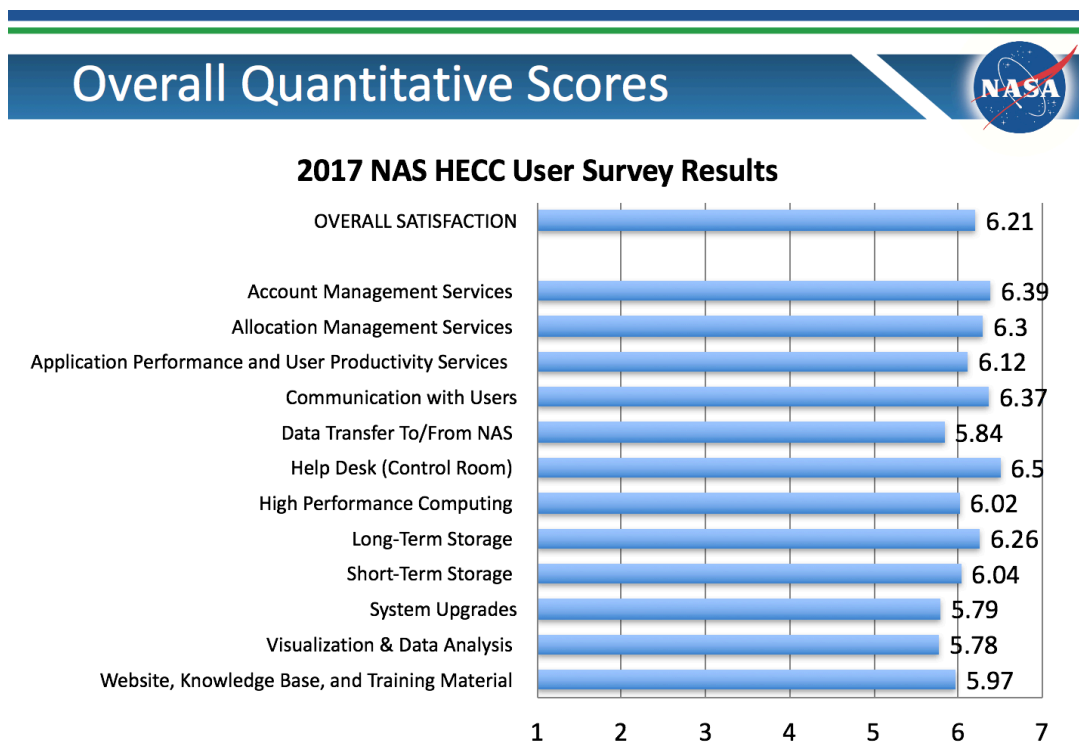
- Scores were very similar compared to the 2015 survey, with Overall Satisfaction scoring 6.21 out of 7.0, compared to 6.19 in the previous survey.
- Control Room and Account Management Services received the highest scores.
- Allocation Management Services showed the largest drop in score compared to the previous survey.
- The most prevalent future need among NAS users is increased compute power.

### Sample comments from users:

*"The knowledge and helpfulness of the IT staff is universally great. Anytime I or my teammates have a question, someone answers it fully, with enthusiasm, and clearly to the very best of their ability. It makes working with the system so much easier."*

*"During the next 2-3 years, our largest simulation runs are going to be five times larger than the size of our current jobs. Given that our current jobs are taxing the system, we desperately need system capacity to increase substantially."*

The following chart shows the overall quantitative scores for each service area:



## **Actions to Date**

Based on your feedback and on data showing which aspects of NAS service need the most improvement, we have taken the following steps in each of the following categories:

### **Job Turnaround Time, Computational Resources**

Job turnaround time was the most common response to the question “What aspects of NAS service need the most improvement?” To address this issue, we made a number of changes, including:

- Deployed Electra Skylake augmentation into production.
- Developed plans/schedule for NAS Facility Expansion (NFE).
- Continued activities to decrease system failures.
- Reminded users to use checkpoint capabilities.
- Adjusted priorities on various mission queues.
- Continued to send reminders on devel queue usage policies.
- Continued with the code improvement initiative.
- Developed and deployed a new tool that releases idle nodes from running jobs.

### **Short-Term Storage, More Disk Space**

To improve performance, uptime, and information on quota limits, we took the following actions:

- Acquired and deployed expansions to the nobackup1 and nobackup2 filesystems.
- Monitored system to identify codes with performance issues and worked with users to modify these codes.
- Worked with vendors to analyze and resolve filesystem performance and stability issues.
- Analyzed usage of short-term storage by mission, and developed usage reports.

### **Training, Navigability of the Knowledge Base (KB), Knowledge of Services Available**

To increase knowledge of services offered, as well as provide more training opportunities and guidance, we completed the following tasks:

- Developed long-term user training (webinar) schedule.
- Began planning for 2018 training schedule.
- Implemented a best practice: Control Room analysts send links to the appropriate KB articles to assist users in resolving their issues.
- Continued updates and improvements to the Knowledge Base.

### **Allocation and Availability of Resources**

To address lack of transparency/clarity during the allocation process, as well as the availability of resources, we are currently reviewing and analyzing all mission directorate allocation processes.

Thank you to all of you who participated in the 2017 NAS User Survey. We look forward to hearing from you again next year!